

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7601

Petition of Green Mountain Power Corporation for)
a Certificate of Public Good, pursuant to 30 V.S.A.)
§ 248(j), for authority to build a solar generation)
unit at its Berlin #5 facility in Berlin, Vermont)

Order entered: 5/4/2010

I. INTRODUCTION

This case involves a petition filed with the Vermont Public Service Board ("Board") by Green Mountain Power Corporation ("GMP" or "Petitioner") on January 8, 2010. GMP requests approval, pursuant to 30 V.S.A. § 248(j), to construct a photovoltaic solar system ("PV system") at its Berlin Plant #5 in Berlin, Vermont (the "Project"). The proposed PV system is to be built on GMP's existing property located on Dog River Road in Berlin, and consists of 39 fixed, ground-mounted panels, consisting of 952 photovoltaic modules covering approximately one acre. The power rating per module is 210 DC watts and the total project output is anticipated to be 199,920 DC watts (199.9 kW). GMP proposes to install two inverters to convert the DC electricity from the panels to alternating current, which will be located inside a small utility shed adjacent to the PV array. The proposed Project will be constructed entirely on GMP-owned land and use existing distribution poles and rights of way. The Project is being undertaken to add renewable generation resources to GMP's power supply portfolio. The petition included prefiled testimony and exhibits as well as proposed findings and a proposed order, pursuant to the requirements of 30 V.S.A. § 248(j).

On February 1, 2010, GMP filed a Memorandum of Understanding ("MOU") that it entered into with the Vermont Agency of Natural Resources ("ANR"). The MOU addresses issues related to a portion of the Project being located within the floodway fringe of the Dog River and the Project's overall impact on the environment under 30 V.S.A. § 248(b)(5). Both

GMP and ANR agreed that the terms and conditions of the MOU should be included in any Board Order and associated Certificate of Public Good authorizing the construction of the Project.

On March 1, 2010, the Clerk of the Board issued a memorandum informing GMP that additional information was needed in order to complete the review of the Petition. GMP filed the requested information on March 22, 2010.

Notice of the filing in this Docket was sent on March 1, 2010, to all entities specified in 30 V.S.A. § 248(a)(4)(c), and all other interested parties. The notice stated that any party wishing to submit comments as to whether the petition raises a significant issue with respect to the substantive criteria of 30 V.S.A. § 248 needed to file comments with the Board on or before March 31, 2010. A similar notice of the filing was published in *The Times-Argus* on March 3 and March 20, 2010.

The Vermont Department of Public Service ("DPS") submitted comments on March 31, 2010, which stated that the DPS did not believe that the petition raises any substantive issues with respect to the criteria of 30 V.S.A. § 248. No other parties filed comments as requested by the notice.

The Board has determined that the proposed project will be of limited size and scope and that the petition has effectively addressed the issues raised with respect to the substantive criteria of 30 V.S.A. § 248. Consequently, we find that the procedures authorized by Section 248(j) are sufficient to satisfy the public interest and no hearings are required.

II. FINDINGS

1. GMP is a company as defined by 30 V.S.A. § 201(a), and as such is subject to the jurisdiction of the Board pursuant to 30 V.S.A. § 203. Petition at 1.

2. GMP provides electric power in the state of Vermont and owns transmission and distribution facilities in the Town of Berlin in Washington County, Vermont. *Id.*

3. GMP currently owns real and personal property off of Dog River Road (known as "Berlin Plant #5") in Berlin, Vermont. GMP proposes to construct the Project on that site. *Id.*; Castonguay pf. at 1.

4. The property has been used for industrial purposes for at least the past 50 years. Because of the lot's industrial character, the Project will not have an impact on prime agricultural soils. Castonguay pf. at 2.

5. The Project entails the new construction of a Solar PV system, to be built on the Berlin Plant #5 site located off Dog River Road in Berlin, Vermont. The proposed PV system consists of a fixed, ground-mounted array of solar panels, made up of 952 photovoltaic modules. The power rating per module is 210 watts (DC), and the total anticipated Project output is 199,920 watts (199.9 kW) at standard test conditions. GMP estimates that the Project's capacity factor will be 13.7%. Two inverters will convert the DC electricity from the solar array to AC electricity, which will be stepped up in voltage to 12,470 kV phase-to-phase, through a three-phase bank of distribution transformers. The output AC voltage of the inverters is 480V phase-to-phase. The inverters and other protection equipment will be located inside a small utility shed. At full output, GMP estimates that the Project will produce enough power to serve 100 average homes. *Id.*

6. The solar array modules will cover approximately one acre of land. The inverter shed will be approximately 10 feet by 14 feet and will be located across the driveway from the solar array. The inverter shed will be outside the approximate one acre covered by the solar array modules. Castonguay pf. at 3.

7. The PV Modules will be SunTech STP-200, 200-watt modules. The mounting equipment will be SunLink Ballast Ground Mount System. The inverters will be two Satcon PVS-100, 100kW inverters. The inverters will be located inside the inverter shed. GMP has retained Alteris Renewables to perform the engineering, procuring and construction for the solar array. *Id.*

8. The array will be on a ballast ground-mount system, which means that there will be no foundations placed in the ground. The ballast ground-mount system uses concrete ballast to weigh down the PV Modules, without the need for foundations. The inverter shed will sit on a concrete slab. Castonguay pf. at 3-4.

9. The output from the solar panels flows to the inverters, which convert the DC voltage from the solar modules to 480V AC. The 480V AC three phase is then stepped up to the

distribution voltage of 12,470/7,200V through a three-phase bank of overhead pole-mounted transformers that will interconnect with GMP's 12,470V distribution system located along Dog River Road. The transformers will be 12,470/7,200V primary, 480V secondary and will be rated at 75kV individually, for a total bank kV of 225 kV. In order to provide three-phase at the Project location, it will be necessary to add two additional phases to the existing 12.5 kV single-phase line from Route 12, along Dog River Road, to the Project location. All existing poles are of adequate class and height, so there will not be any new poles, any increase in pole height, or use of new distribution right-of-way. Castonguay pf. at 4.

10. The entire Project is estimated to cost \$1.3 million, broken down as follows:

Solar Equipment & Labor	\$1.165 million
Permitting & GMP Labor	\$75,000
Site work, Inverter Shed, Misc.	\$32,000
Distribution Upgrade	\$28,000

Castonguay pf. at 4-5.

11. GMP and its contractor Alteris Renewables anticipate breaking ground in the spring of 2010, and completing the Project by end of summer of 2010. Castonguay pf. at 5.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

12. The Project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. This finding is supported by findings 13 through 19, below.

13. The Project is located entirely on private property owned by GMP. The surrounding property is dedicated to industrial uses including power generation and transmission. A large nearby propane distribution center uses the railroad running through GMP's property. The

Project is close to the Montpelier Water Pollution Control Plant and Montpelier Department of Public Works facility.¹ Castonguay pf. at 5.

14. The Project is consistent with the Berlin Town Plan and the Central Vermont Regional Plan. A detailed review performed by Jim Palmer of T. J. Boyle Associates, LLC, concluded that the Project is in conformance with the general goals of the local and regional plans. Castonguay pf. at 5; exh. JFP-2 at 3-4.

15. The Berlin Town Plan refers to encouraging the development of alternative energy as follows: "Encourage alternative energy resources such as wind and solar..." Castonguay pf. at 5; exh. JPC-9 at 27.

16. The Central Vermont Regional Plan refers to the implementation of solar power as a "tremendous potential for providing clean, reliable and safe energy, even in Vermont's climate." Castonguay pf. at 5; exh. JPC-10 at 3-10.

17. By letter dated August 20, 2009, the Berlin Planning Commission stated that it had agreed to waive the 45-day notice pursuant to § 248(f) and that it supports the Project as being consistent with the Town Plan and does not anticipate that this Project will negatively impact the orderly patterns of development in Berlin. Castonguay pf. at 5-6; exh. JPC-11 at 1.

18. By letter dated August 12, 2009, the Central Vermont Regional Planning Commission stated that it had agreed to waive the 45-day notice pursuant to § 248(f). Castonguay pf. at 6; exh. JPC-12 at 1.

19. The Project will not be visually adverse because it is located in close proximity to, and is visually compatible with, existing industrial-type facilities located within the vicinity. The Project is not visible from most publically accessible locations, except for northbound travelers on Interstate 89 where a view from over a mile distant will last approximately 10 seconds at the posted speed limit. Palmer pf. at 3.

1. On December 9, 2009, the Board issued an Order approving a smaller (59.9 kW) photovoltaic generation project located at the City of Montpelier's waste water treatment facility at 949 Dog River Road, Montpelier, Vermont. This project was approved as a net-metered system and is interconnected with GMP's distribution system. See CPG No. NM-824, Order of 12/9/09.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

20. The proposed Project is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and load management measures. This finding is supported by findings 21 through 23, below.

21. Project need is not driven by reliability or load-growth concerns in the Berlin area. Rather, it is a renewable generation project intended to bring cost-effective, reliable, carbon-free energy to GMP ratepayers. Castonguay pf. at 6.

22. Since the end of 2004, the Vermont Sustainably Priced Energy Enterprise Development program ("SPEED") requires utilities to meet all load growth with renewable resources. The Project will assist GMP in attaining that goal. Castonguay pf. at 6.

23. The Project also contributes to the SPEED goal of generating a minimum percentage of Vermont's energy needs through renewable generation. Castonguay pf. at 6.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

24. The proposed Project will not adversely affect system stability and reliability. This finding is supported by findings 25 and 26, below.

25. The Project was reviewed by GMP's engineering department under PSB Rule 5.500 and satisfied the fast-track screening criteria. The Project will not pose any undue or adverse impact on electric reliability or stability in the area. Castonguay pf. at 6.

26. The Project will be connected directly to GMP's distribution system, and was reviewed under Rule 5.500. An ISO New England Interconnection process is not required. *Id.*

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

27. The proposed Project will result in an economic benefit to the state. The Project will be constructed using local labor, and will take approximately 228 person-days to complete,

consisting of various trades such as electricians, site-work contractors, and solar-equipment installers. GMP anticipates that the Project will be constructed as a cost that allows Project power to be produced at significantly less than the current SPEED Solar Standard Offer price of \$0.30 / kWh. As proposed, the Company estimates that the Project will operate for \$0.17/kWh. Castonguay pf. at 7.

Aesthetics, Historic Sites, Air and Water Purity,
the Natural Environment and Public Health and Safety

[30 V.S.A. § 248(b)(5)]

28. The Project as proposed will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety. This finding is supported by findings 29 through 54, below, which are based on the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8), 8(A) and (9)(K).

Outstanding Resource Waters

[10 V.S.A. § 1424(a)(d)]

29. The Project is not located near and will have no effect on any outstanding resource waters. Nelson pf. at 5.

Water and Air Pollution

[10 V.S.A. § 6086(a)(1)]

30. The photovoltaic process converts the sun's energy into electricity. This process does not emit pollutants into the air or the water, and thus will not result in undue water or air pollution. Castonguay pf. at 7.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

31. The Project site is not located within a headwaters area, as it is not located within lands characterized by steep slopes and shallow soils, drainage areas of 20 square miles or less, above

1500 feet in elevation, watersheds of public water supplies, or lands supplying significant amounts of recharge to aquifers. The Project will therefore have no impact on headwaters. Nelson pf. at 5.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

32. The Project's minimal construction waste will be disposed of in accordance with all applicable rules and regulations, in approved landfills. Castonguay pf. at 7.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

33. The Project does not require water for construction, or in normal operation, thus water conservation measures will not be necessary. Castonguay pf. at 8.

Floodways

[10 V.S.A. § 6086(a)(1)(D)]

34. GMP has worked with ANR to evaluate both inundation and fluvial erosion hazards ("FEH") at the Project site, associated with the Dog River. With respect to fluvial erosion hazards, GMP has modified the design of the PV array, and ANR has refined the limits of the FEH zone onsite based on additional field evaluation, so that the Project is not located within the FEH zone. Nelson pf. at 6; exh. JAN-4.

35. With respect to floodwater inundation, the mapping of the site based on Flood Insurance Rate Maps ("FIRMs") as presented in a 1984 Flood Insurance Study ("FIS") prepared by FEMA have been reviewed and discussed with ANR. This mapping shows the floodway and 100-year floodplain poorly aligned with the channel of the Dog River. During a site visit, ANR presented a draft mapping update titled "Washington County 2007 Pre DFIRM". This mapping represents a correction of earlier mapping to shift the Special Flood Hazard Area ("SFHA") to better reflect the channel location. Although this information is not currently in effect, it represents the best available information and therefore can be used for assessment of inundation risks. Based on this

information the proposed array is located predominantly outside the mapped DFIRM floodway. Most of the remainder of the Project area is within the floodway fringe but outside the floodway, and therefore below the base (100-year) flood elevation of approximately 523 feet in the area of the site. Some regrading of these areas is proposed, primarily involving spreading the existing soil stockpile to achieve a more level pad for the array. For the structures within the floodway fringe, ANR indicated that the equipment would need to be anchored and that the machinery should be elevated above the base flood elevation. Electrical connections should be made water tight. The inverter shed should be placed out of the floodplain. If the existing trailer is within the floodplain, it should also be anchored down. Nelson pf. at 6-7; exh. JAN-5.

36. All Project improvements will be placed outside of the floodway and FEH area. GMP proposes to anchor down and make watertight those Project components proposed to be located at elevation 523 feet or below. The inverter shed should be placed out of the floodplain. Therefore, the Project will have no adverse effect on and will not restrict or divert the flow of flood waters, and will not endanger the health, safety and welfare of the public or of riparian owners during flooding. Furthermore, the Project will not significantly increase the peak discharge of the river or stream within or downstream from the area of development and endanger the health, safety, or welfare of the public or riparian owners during flooding. Nelson pf. at 7-8.

Discussion

GMP and ANR have reached agreement on the measures necessary to address floodway concerns. These measures are included in the MOU, and our Order today requires that GMP comply with the terms of the MOU.

Streams, Shorelines & Wetlands

[10 V.S.A. § 6086(a)(1)(E) ,(F) and (G)]

37. GMP retained VHB Pioneer ("Pioneer") to perform a field evaluation of the Project site for the presence of wetlands and streams. Pioneer's report documenting the results of its investigation has been provided to ANR. The Project borders on a segment of the Dog River but does not abut a shoreline, therefore the Project will not have an adverse affect on shorelines.

Field mapping of the top of the bank to the Dog River was also performed by Pioneer staff. No wetlands were identified within the Project site. Therefore the Project will have no adverse effect on wetlands or streams. Nelson pf. at 8; exh. JAN-2 at 1-3.

38. The Project site has been evaluated pursuant to the ANR Riparian Buffer Guidance (December 2005). Based on this evaluation, a variable width riparian buffer zone of 75 to 100 feet wide, measured from the field-determined top of bank (as shown on Pioneer's plan titled "Green Mountain Power Corporation, Proposed Photovoltaic Solar System Project, Berlin, VT", dated August 21, 2009 (*see* exh. JAN-5), is proposed by GMP to fully protect riparian functions and values. The buffer zone currently is comprised of a mix of a small area of deciduous forested upland, scrub shrub upland, and managed open field. The area with the buffer would be allowed to grow back, although periodic vegetation management may be needed to prevent shading of the PV array. During the life of the Project, GMP's cutting of vegetation will be limited to trees or other brush that have the potential to cause shading of the PV array, and would be limited to within those areas that are currently scrub shrub upland or open field. Nelson pf. at 9.

39. Based on the implementation of these practices, the Project will have no adverse effect on and will not violate any rules applicable to significant wetlands, will maintain the natural condition of the Dog River, and will not endanger the health, safety, or welfare of the public or of adjoining landowners. *Id.*

Discussion

The MOU includes buffer-zone requirements that will protect the Dog River. Our Order today requires that GMP comply with the terms of the MOU.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

40. The Project will not require a source of water, and will therefore not be a burden on any existing water supply. Castonguay pf. at 8.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

41. Because just over one acre of ground would be disturbed during construction of the facility, authorization under the Construction Stormwater NPDES General Permit (GP 3-9020) will be required. A Notice of Intent ("NOI") was filed by GMP on August 13, 2009, as a low-risk Project, based on the risk analysis methodology associated with GP 3-9020. Following completion of public notice as required under GP 3-9020, DEC Authorization of NOI #6197-9020 was issued on August 31, 2009. Nelson pf. at 5.

42. The Project will not result in the creation of new impervious surface which would require an operational-phase discharge permit pursuant to 10 V.S.A. § 1264. With respect to operational-phase storm water, the governing criterion is whether the Project would result in greater than 5,000 square feet of new impervious area. This includes any roads, driveways, building roofs, footings, etc. that would be constructed for the Project. Since no new roads or driveways are proposed, and the only area of new impervious surface would be the inverter shed (140 square feet) which is less than 5,000 square feet, no operational-phase storm water discharge permit will be required. Nelson pf. at 6.

Transportation Systems

[10 V.S.A. § 6086(a)(5)]

43. The Project will not cause unreasonable congestion or unsafe conditions with respect to use of highways, waterways, railways, airports and airways, and other means of transportation existing or proposed. Delivery of the solar panels will be accomplished via standard shipping transport. Castonguay pf. at 8.

Educational and Municipal Services

[10 V.S.A. § 6086(a)(6)&(7)]

44. The Project will not add any permanent residents to the town of Berlin, and therefore will not cause a burden on the Berlin educational services. *Id.*

45. The Project will not require the Town of Berlin to provide or expand services related to fire and police protection, solid-waste disposal, sewage treatment, water supply, rescue services, or road maintenance. The installation and maintenance of the solar panels and associated equipment will not threaten public safety. Access to the site is controlled by GMP. *Id.*

Aesthetics, Necessary Wildlife Habitat, Historic Sites and Rare and Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

46. The Project will not destroy or significantly imperil necessary wildlife habitat or any endangered species, the scenic or natural beauty of the area, or rare and irreplaceable natural areas. This finding is supported by findings 47 through 54, below.

47. T. J. Boyle Associates conducted a day-long field investigation, analyzed GIS data, USGS maps, aerial photography, and detailed design plans using the latest computer technologies to understand the Project and how it will alter the visual character of the landscapes in which it is proposed. These investigations indicate although the Project is located near a densely populated area of Vermont and certain portions of the Project have the potential to be visible, the Project will not have an adverse visual impact, for two reasons. First, the Project is located in close proximity to and visually compatible with industrial-type facilities, including the Montpelier Water Pollution Control Plant, the Montpelier Department of Public Works facility, and GMP's Berlin Plant #5. Second, the field investigation determined that the Project is not visible from most publically accessible locations where potential visibility was indicated by a topographic viewshed analysis. The point of greatest visibility will be to northbound travelers on Interstate 89, where a view from over a mile distant will last approximately 10 seconds at the posted speed limit. It is unlikely that the Project will be distinguishable from other industrial facilities in the view. For these reasons, the impact will not be adverse. Palmer pf. at 2-3.

48. The field investigation was conducted on August 7, 2009, when the trees have leaves. The hedgerows and trees surrounding the Project site are mostly deciduous, but they will provide a branchy screen to filter views of the site in the winter. From the local roads, if the Project were (partially) visible, then the viewer would also see the Berlin Plant #5 and probably railroad cars. In addition, viewers would be traveling past facilities such as the Water Pollution Control Plant

and Department of Public Works facility. In this context the proposed photovoltaic system is not sufficiently noticeable to present an adverse visual impact. Palmer pf. at 3-4.

49. Views of the Project from I-89 would be between one-quarter to two miles away. Southbound travelers would be seeing the backs of the photovoltaic panels, which will be medium gray and should be difficult to distinguish from the surrounding landscape. As noted above, northbound travelers would have a 10-second view looking down on the Project site. They would see the darker front side of the photovoltaic panels, which would be in the context of other industrial facilities scattered along the railroad tracks and local roads. Travelers should not have sufficient time to pick the Project out and recognize it, so again the visual impact will be Not Adverse. Palmer pf. at 4.

50. At GMP's request, the Louis Berger Group, Inc. ("Berger") assessed the archaeological potential of the Project components through field reconnaissance of the area of potential effect ("APE") and background research. Berger determined the APE's archaeological sensitivity based on its potential for intact subsurface soils, its relationship to nearby known archaeological sites and historic structures, and other criteria, including soils, topography, and proximity to water. Berger conducted testing across approximately 0.92 hectares (2.3 acres) of the APE given its generally level and well-drained topography and proximity to the Dog River. Although modern disturbance has impacted certain portions of the APE, large sections appear to remain relatively intact. Luhman/Penney pf. at 2-3.

51. Berger's archaeological resource assessment ("ARA") relied on background research and field reconnaissance to develop the assessment. An assessment such as this is intended to provide a baseline on which any subsequent investigations will be built. Luhman/Penney pf. at 3.

52. Berger completed its Phase I archaeological survey of the APE. Subsurface testing in archaeologically sensitive areas revealed that the majority of the Project area has been previously impacted through cutting and filling activities. Additional testing in areas where disturbance was suspected confirmed that those areas were in fact previously impacted. No intact cultural remains were located in the APE. Luhman/Penney pf. at 4.

53. The Project site has been evaluated by Pioneer for the presence of rare, threatened and endangered ("RTE") plant species as well as the potential for the site to serve as a rare and

irreplaceable natural area ("RINA"). Pioneer conducted a search of existing databases for known occurrences of both RTE plants and RINA. No previously identified occurrences of either RTE plants or RINA were recorded by the Vermont Nongame and Natural Heritage Program ("NNHP") within or immediately adjacent to the investigation area. A field assessment by Pioneer confirmed the absence of RTE plant species or RINA on the Project site. Nelson pf. at 9-10; exh JAN-3.

54. No necessary wildlife habitat is present on the Project site. ANR mapping shows no critical wildlife habitat such as deer wintering areas within the vicinity of the Project. Nelson pf. at 10.

Discussion

Based on the above findings, the proposed project will not have an undue adverse effect on the aesthetics or scenic and natural beauty of the area. In reaching this conclusion, we rely on the Environmental Board's methodology for determination of "undue" adverse effects on aesthetics and scenic and natural beauty as outlined in the so-called Quechee Lakes decision. Quechee Lakes Corporation, 3W0411-EB and 3W0439-EB, dated January 13, 1986.

As required by this decision, it is first appropriate to determine if the impact of the project will be adverse. The project would have an adverse impact on the aesthetics of the area if its design is out of context or not in harmony with the area in which it is located. If it is found that the impact would be adverse, it is then necessary to determine that such an impact would be "undue." Such a finding would be required if the project violates a clear written community standard intended to preserve the aesthetics or scenic beauty of the area, if it would offend the sensibilities of the average person, or if generally available mitigating steps would not be taken to improve the harmony of the project with its surroundings. The Board's assessment of whether a particular project will have an "undue" adverse effect based on these standards should be significantly informed by the overall societal benefits of the project.²

The Project is located on an existing industrial site dedicated to industrial uses including power generation and transmission, and therefore will visually appear to blend in with those uses and will not significantly change the character of the area. The Project is consistent with both the

2. Docket 6884, Order of 4/21/04 at 20-21.

local and regional plans. In addition, the low profile of the PV system and the degree of screening provided by existing trees and shrubs minimize the visual impact of the Project on the surrounding landscape. When viewed in this context, the Project will fit the context of its surroundings and will not have an adverse aesthetic impact.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

55. The Project will not have any adverse effect on public investments, public utility facilities or public lands. The closest public investment is the Dog River Road. This Project is outside of the Dog River Road right of way, and will not affect this or other local public investments. Castonguay pf. at 9.

Public Health and Safety

[30 V.S.A. § 248(b)(5)]

56. The Project will not have an adverse effect on the public health and safety. Castonguay pf. at 7.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

57. The Project is consistent with the principles for resource selection expressed in GMP's approved least-cost integrated resource plan ("IRP"). In its 2007 IRP at page 74, GMP has committed to meeting as much of its future energy shortfall with renewables as possible. The Project facilitates the development of new renewable energy resources. Castonguay pf. at 9; exh. JPC-7.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

58. The Project is in compliance with the Vermont Electric Plan. Emerging and Sustainable Energy Technologies is a topic covered by the Vermont Electric Plan, dated January 19, 2005. Specifically, pages 5-23 of this plan states as a recommendation that "State regulators and utilities should monitor renewable technology improvements and assess cost-effectiveness and

applicability for Vermont...." Since the 2005 Electric Plan was drafted, Solar PV has significantly reduced in total installed cost per kW. Also, the Vermont Legislature has enacted a requirement that Vermont utilities purchase electricity from solar PV and other renewable technologies through the use of a Standard Offer. GMP anticipates that the cost of Project power will be significantly less than the current standard-offer price for electricity purchased from standard-offer solar projects. Castonguay pf. at 9; exh. JPC-8.

Waste-to-Energy Facilities

[30 V.S.A. § 248(b)(9)]

59. The Project does not involve a waste to energy facility. Castonguay pf. at 10.

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

60. The Project can be served economically by existing transmission facilities, without undue adverse impact on Vermont utilities or customers. GMP anticipates no changes to area transmission facilities will be required as a direct result of the Project. The Project will be connected directly to GMP's 12 kV distribution system located along Dog River Road. Currently, a single-phase line exists on the property. As noted above, GMP will be installing two additional phases from pole 12, at the intersection of Route 12 and Dog River Road, to pole 15, located on Nelson Drive, on the GMP Berlin #5 property. The project is therefore capable of being served by existing transmission facilities and will not require any modification thereof. Castonguay pf. at 10.

III. CONCLUSION

Based upon all of the above evidence, we conclude that the proposed Project will be of limited size and scope; the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j); and the proposed project will promote the general good of the state.

IV. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The proposed construction of Green Mountain Power Corporation's ("GMP") photovoltaic solar system at GMP's Berlin Plant #5 in Berlin, Vermont ("Project"), in accordance with the evidence, plans, and other information presented in this proceeding, will promote the general good of the State of Vermont in accordance with 30 V.S.A. Section 248, and a certificate of public good shall be issued in the matter.

2. Prior to proceeding with construction, GMP shall obtain all necessary permits and approvals for the Project. Construction, operation, and maintenance of the Project shall be in accordance with such permits and approvals.

3. GMP shall comply with the terms and conditions of the Memorandum of Understanding between GMP and the Vermont Agency of Natural Resources dated January 19, 2010.

Dated at Montpelier, Vermont, this 4th day of May, 2010.

<u>s/James Volz</u>)	
)	
)	PUBLIC SERVICE
<u>s/David C. Coen</u>)	
)	BOARD
)	
)	OF VERMONT
<u>s/John D. Burke</u>)	

OFFICE OF THE CLERK

FILED: May 4, 2010

ATTEST: s/Susan M. Hudson
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.